

April 15, 1960
Charlottesville -

8:20
Mileage - 3248

No. 4-1660-1
Charleston

Date April 16, 1960
Co. & State McMinn Co., Tenn.

Loc. about 2 1/2 miles n. of Charleston, U. S. Hy. 11
1-2 ft. deep ditch, with algae -
(abundant submerged algae)

Water clear, probably polluted (paper factory) Flow moderately swift
Width _____ Depth _____ pH _____ Temp. _____

Bottom pebbly and mud

Vegetation algae

Shore cultivated land, rubus
lonicera

Air Temp. _____

Weather _____ Time 7:30 A.M.

Capture _____

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. striatus</u>					1		

9545 Cleveland
7/7/9

No. 4-1660-2a, b, c

Date April 10, 1960

Charleston

Co. & State Bradley Co. Tenn.

Loc. 3 miles s. of Charleston, Va. Hwy. 11

trib. to Mouth Cr., to Hiwassee

4-10 ft. wide - near Bill Forest

Water clear

Flow

Width

Depth + 1 1/2

pH

Temp.

Bottom most clay, gravel - few stones

Vegetation

Shore

open farm lands

Air Temp.

Weather

Time

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<i>O. erichsonianus</i>	1			6	2		
<i>C. l. longirostris</i>	1	4	6	3	4		
<i>C. striatus</i>				1			

No. 4-1660-3

Date Apr. 16, 1960

Charleston

Co. & State Bradley Co., Tenn.

Loc. 3 miles s. of Charleston, U. S. Hy. 11

Cress & Gint-filled stream

near Bell Mount trib. to Mouth Creek, to Hiwassee

Water clear, very swift Flow

Width Depth pH Temp.

Bottom clay & gravel

Vegetation

Shore open farm lands

 Air Temp.

Weather Time

Capture

Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. l. longirostris</u>	<u>3</u>	<u>4</u>	<u>8</u>	<u>6</u>	<u>12</u>			

88.2
87

No. 4-1660-4a, 4b, 4c.

Date April 16, 1960

Guild

Co. & State Marion Co., Tenn.

Loc. 1.2 miles s. of U. S. Hy. 72, on St. rt. 134
near crossing of river on hy.

Water trib. to Tenn. - clear, swift Flow rapid

Width 25 ft. Depth +3 pH Temp.

Bottom rocky

Vegetation no veg. in water

Shore pine maple cypress willow

Air Temp.

Weather clear,

Time 12

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<i>O. rusticus</i> forceps	9					2	
<i>O. erichsonianus</i>	1						
<i>Cambarus bartonii</i> subsp.			1	1			

803.2 S. Pittsburgh

No. 4-1660-5

Date Apr. 16, 1960

Scottsboro

Co. & State Jackson Co., Ala.

Loc. just n. of city limits of Scottsboro, U. S. Hy. 72.

Minnow farm. ponds.

series of excavations.

Water

Flow

Width

Depth

pH

Temp.

Bottom

Vegetation Typha, algae

Shore

Air Temp.

Weather

Time

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>P. blandingii acutus</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>		

No. 4-1660-6a, 6b

Date Apr. 16, 1960

Scottsboro

Co. & State Jackson Co., Ala.

Loc. Creek - just n. of city limits of Scottsboro,
U. S. Hy. 72

Water _____ Flow _____

Width _____ Depth _____ pH _____ Temp. _____

Bottom sand & mud - no rocks - debris

Vegetation _____ burrs everywhere

Shore Willows - hardwood swamp

Air Temp. _____

Weather _____ Time _____

Capture _____

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>P. b. acutus</u>		1	2	2	4		
<u>C. striatus</u>		1	3	6	10		

run
11/10

76.5
Arab 79.0

No. 4-1660-7a, b
Arab

Date Apr. 16, 1960

Co. & State Marshall Co., Ala.

Loc. 2 1/2 mi. e. of Arab, St. Hy. 69
trib. to Brown's Creek Tennessee R.

Water clear

Flow moderate

Width 10-15 ft. Depth up to 2 ft. pH Temp.

Bottom rocky with sponge, algae, bryozoa

Vegetation none

Shore willow, pine, tulip, poplar

Air Temp.

Weather Sunny, warm

Time 3:45

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♂j	♀e	♀y
<i>C. striatus</i>	2	2	6				
<i>O. lenticularis validus</i>	1						

2 bottles

83.6

75.6

No. 4-1660 - Pa, b

Date Apr. 16, 1960

Arab

Co. & State Cullman Co., Ala.

Loc.

6.6 miles s.w. of Arab, St. Hy. 69
(Black Warrior drainage)

Water

Flow

mod. to sluggish

Width

2-10 ft.

Depth

3+

pH

Temp.

Bottom

rocky - bed rock in part

Vegetation

none in water

Shore

pine, liriiodendron

Air Temp.

Weather

Time

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
C. obsoletus	1	1	6	1			
C. striatus			3	1	1		

98.8

$$\begin{array}{r} 79 \\ 1918 \end{array}$$

Cullman - 909.1

$$\begin{array}{r} 904.5 \\ 898.8 \\ 5.7 \end{array}$$
No. 4-1660-9Date Apr. 16, 1960CullmanCo. & State Cullman Co., Ala.Loc. Little River, 5.7 miles n.e. of Cullman,St. Hy. 69(19.8 mi. s.w. of Arab)Water clearFlow mod. to rapidWidth 20-25 Depth to 2 ft.pH Temp. Bottom rocky + sandyVegetation Shore in ravine, with usual ravine treesAir Temp. Weather Time 5:30Capture Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. striatus</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>			

No. 4-1760-1a, 1b
Cullman

Date Apr. 17, 1960
 Co. & State Cullman Co., Ala.

Loc. 6.1 mi. N. of Cullman, U.S. Hy. 278
Trib to Ryan Creek.

Water clear Flow moderate at ripples

Width 10-20 ft. Depth up to 2 pH Temp.

Bottom rocky

Vegetation none in water - algae

Shore pinus - Liriodendron

Air Temp.

Weather rainy Time 9:15 A.M.

Capture

Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
C. obsoletus							
<u>C. obsoletus</u>			2				
<u>C. striatus</u>			3	1	1		

21.1
09
12.1

No. 4-1760-2

Date Apr. 17, 1960

Cullman

Co. & State Cullman Co., Ala.

Loc. 12.1 mi. W. of Cullman, U. S. Hy. 278

Crooked Creek

Water clear Flow mod. at riffles

Width ²⁰ 40 ft. Depth +3 pH Temp.

Bottom sand & rock at riffles

Vegetation none

Shore deep valley stream like preceding no.

Air Temp.

Weather rainy Time 10:15 A.M.

Capture

Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. obsoletus</u>					4		

addition
32.2

30.0
09.1
20.9

No. 4-1760-3a, 3b.

Date Apr. 17, 1960

Cullman

Co. & State Winston Co., Ala.

Loc. 20.9 mi. W. of Cullman, U.S. Hy. 278

East Fork of Crooked Cr.

- Black Warrior Drainage -

Water clear

Flow sluggish to med.

Width 40 ft.

Depth up to 3

pH

Temp.

Bottom

sandy with scattered rocks

Vegetation

none in water

Shore

ravine stream - willows, Liriodendron,

pine, cirsia

Air Temp. 10:45 A.M.

Weather

overcast

Time

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. obetipus</u>	2			2	1		
<u>O. retiferus</u>	8	2	2		1	3	

66.3
50.6
15.7 Double Springs

42.9
32.2
10.7

No. 4-1760-4
Addison

Date Apr. 17, 1960
Co. & State Winston Co., Ala.

Loc. 10.7 mi. W. of Addison, U. S. 278
W. Fork Deep River

Water clear Flow very swift except along banks

Width 40-75 ft. Depth 3+ pH Temp.

Bottom sand + rock

Vegetation none in water

Shore typical of ravine stream

Air Temp.

Weather Time noon

Capture

Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. crockeri</u>	<u>1</u>							

Date 4-1760-5a, 5b

Cat. No. Apr. 17, 1960

P.O. Double Springs

Co. & State Walker Co., Ala.

Locality. 15.7 mi. S. of Double Springs, St. Hy. 195

Quadrangle _____

Elevation _____

Water: slightly cloudy Flow sluggish

Width 2-4 ft. Depth up to 2 pH _____ Temp. _____

Bottom very few rocks, much debris

Vegetation _____

Shore swampy terrain

Air Temp. _____

Weather overcast Time 1:00

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

C. striatus 1♀, 2 juv ♀

O. crockeri 1♂, 1♀, 1♀ with eggs.

87.1
84.7
2.4
jasper

Date 4-17-60 - 6a, 6b, 6c.

Cat. No. apr. 17, 1960

P.O. Jasper

Co. & State Walker Co., Ala.

Locality. 2.4 mi. W. of Jasper, U.S. Hy. 78

Trk to Mulberry Hk. of Black Warrior

Quadrangle _____

Elevation _____

Water: slightly cloudy

Flow sluggish

Width 10-20 ft.

Depth up to 4

pH _____

Temp. _____

Bottom sand & silt

Vegetation none

Shore willow swamp - tulipe poplar

Air Temp. _____

Weather _____

Time 2:15

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

O. setiferus 1♂I, 1♂II, 1♂jnr.

C. obliquus 2 jnr ♂.

C. striatus 2 jnr ♀

Date 4-1760-7a, 7b, 7c, 7d

Cat. No. Apr. 17, 1960

P.O. Carona

Co. & State Walker Co., Ala.

Locality. 16.2 mi. from junction of U.S. 78 with St. Hy. 69,
on St. Hy. 18

Quadrangle _____

Elevation _____

Water: clear

Flow sluggish

Width 15 ft.

Depth 6 in.

pH _____ Temp. _____

Bottom small pebbles

Vegetation none

Shore willow, sweet gum, tulip poplar

Air Temp. _____

Weather overcast

Time 3:00

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

lots of diogenes burrows

O. crockeri? 207 juv, 2 ♀ juv

O. setiferus? 107 juv.

C. obsoletus 207 juv

C. striatus 107 II, 1 ♀ juv.

15.8
0.7.2
8.6

Date 4-1760-8a, 8b, 8c

Cat. No. Apr. 16, 1960

P.O. Berry

Co. & State Fayette Co., Ala.

Locality. 8.6 mi. W. of Fayette - Walker Co. line, St.
Hy. 18

Quadrangle _____

Elevation _____

Water: clear

Flow sluggish

Width 6-10 ft. Depth 2+ pH _____ Temp. _____

Bottom clay + rocks

Vegetation none

Shore sweet gum, willow, few pines

Air Temp. _____

Weather _____ Time 4:00

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

O. decus 2♂I, 1♂jnr 2♀jnr 3♀eggs

O. crockeri? 1♂II, 2♂jnr 3♀jnr 1♀egg

C. striatus 1♀, 1♂jnr

32.8 Fayette
9

Date 4-17-60 - 9a, 9+ Cat. No. Apr. 17, 1960
P.O. Fayette Co. & State Fayette Co., Ala.
Locality. 5 mi. w. of Fayette, St. Hy. 96
Lombiger drainage
Quadrangle _____ Elevation _____
Water: cloudy Flow moderate
Width 10 ft. Depth 3+ pH _____ Temp. _____
Bottom sand + silt
Vegetation none
Shore willow, sweet gum, shad bush
Air Temp. _____
Weather rainy Time 5 P.M.
Method of Capture _____
Preservative _____
Collected by: _____
General Notes:

C. striatus var 1♂ I, 4 ♂ II, 2♀, 1♂ juv, 2♀ juv.
(not notched cent. proj.)

O. wurti 1 juv ♂.

43.0 Fayette - Lamar Co. line

Date 4-17-60-10a, 10b

Cat. No. Apr. 17, 1960

P.O. Fayette

Co. & State Fayette Co., Ala.

Locality. 9 mi. W. of Fayette, St. Hy. 96
Fountain

Quadrangle _____

Elevation _____

Water: slightly cloudy

Flow mod. to swift

Width 10 ft. Depth + 3 pH _____ Temp. _____

Bottom sandy

Vegetation none

Shore sallyx, pines, sweet gum -
flat cultivated land

Air Temp. _____

Weather _____ Time 5:40 P.M.

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

O. weeti 207 II, 107 jmr, 1 ♀ jmr.

C. striatus 2 ♀, 107 jmr

$$\begin{array}{r} 51.1 \\ 43.0 \\ \hline 8.1 \end{array}$$

Date 4-17-60 - 11a, 11b

Cat. No. Ap. 17, 1960

P.O. Millport

Co. & State Lamar Co., Ala.

Locality. 8.1 mi. w. of Fayette - Lamar Co. line.
St. Hy. 96

Quadrangle _____

Elevation _____

Water: slightly cloudy

Flow moderate

Width 30 ft.

Depth + 3

pH _____

Temp. _____

Bottom sand

Vegetation none

Shore swampy - sweet gum, etc.

Air Temp. _____

Weather overcast

Time 6:15 P.M.

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

O. westi 207 II

C. striatus 207 II, 17

Date 4-1860-1a, 1b, 1c

Cat. No. Apr. 18, 1960

P.O. Columbus

Co. & State Lauderdale Co., Miss

Locality. 8 miles e. of Columbus, St. Hy. 50
(called Hy. 10 on map)

Quadrangle _____

Elevation _____

Water: slightly cloudy

Flow moderate

Width 6-10 ft.

Depth

6 in. - 2 ft.

pH _____

Temp. _____

Bottom sand + gravel

Vegetation none

Shore

sweet gum, pine, liriodendron, dogwood

Air Temp. _____

Weather

sunny

Time

9:00 A.M.

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

O. crockeri 10♂ I, 70♂ II, 10♀, 10 juv, 1♀ with young

P. b. acutus 10♂ II, 3 juv ♂, 6 juv ♀.

C. striatus var 10♂ I, 50♂ II, 6 juv ♂, 4 juv ♀

2 bottles

Date 4-1860-2a, 2b, 2c, 2d

Cat. No. Apr. 18, 1960

P.O. Columbus

Co. & State Lewis Co., Miss.

Locality. 5.3 mi e. of Columbus, St. Hy. 50
(called 9th, 10 on map)

Quadrangle _____

Elevation _____

Water: _____ Flow _____

Width _____ Depth _____ pH _____ Temp. _____

Bottom Roadside ditch, choked with grasses

Vegetation _____

Shore _____

Air Temp. _____

Weather _____ Time 10 A.M.

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

C. fadiens? 10⁺ I (numbered - (4-1860-2))

C. diogenes 1 juv ♀

P. hybus 50⁺ II, 3 ♀

P. b. acutus 30⁺ II, 100⁺ juv 13 ♀ juv.

(36)

35 (14) 10 1/2

1.8
1.4
32
54
5.5
23

99.3

4 bottles

No. 4-1860-3a, 3b, 3c, 3dDate Apr. 18, 1960ColumbusCo. LouisesSt. Miss.Locality 2.3 mi. w. of Columbus, U.S.Hy. 82Roadside ditch 200 ft. long, not over 2 ft. deep

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 11:30 Weather Sunny Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom grasses

Shore _____

P. b. acutus ^{207I ? 2♀} 107I, 407II, 4♀, ^{6 juv ♂} 10 juv ♂, ^{12 juv ♀} 12 juv ♀ } two jarsP. viae viridis - 3207II 36♀ (Bottle II) 107I, 207II, 1♀P. hybna - 107IIC. fodiens - 1♀

1707

106.3
95
11.3

No. 4-1860-4a, 4b
Columbus

Date Apr. 18, 1960

Co. Lauderdale

St. Miss.

Locality 11.3 mi. W. of Columbus, U.S.

Hy. 82

Roadside ditch - on prairie

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 12:45 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore open pasture lands

P. b. acutus 10♂I, 3♀, 3juv♀

P. lybur 8♂II, 8♀

No. 4-1860-5

Starkville

Date Apr. 18, 1960

Co. Oktibbeha

St. Miss.

Locality 6.4 miles s.w. of Miss. State Univ.
Campus, St. Hy. 12 -

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 3:00 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow almost none Temp. _____ pH _____

Width 10-20 ft. Depth 2 ft. O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom clay + sand

Shore grass, pine - flat prairie land

P. acutissimus 3 ♂ I, 4 ♂ II, 3 ♀, 1 juv ♂, 1 juv ♀

33.9
18.7
15.2

No. 4-1860-6
Starkville

Date Apr. 18, 1960

Co. Oktibbeha

St. Miss.

Locality 15.2 mi. s.w. of Miss. St. Univ.

campus, St. Hy. 12

Roadside ditch Barrow pit

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 3:30 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore _____

P. acutissimus — 3♀, 5♂ juv 7♀ juv
(labeled P. hayi)

2 bottles

38.9
36.2
2.7

No. 4-1860-7a, 7b, 7c

Sturgis

Date Apr. 18, 1960

Co. Oktibbeha

St. Miss.

Locality 2.7 mi. W. of Sturgis, St. Hy. 12
.6 mi. E of Oktibbeha - Choctaw

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 4:00 Weather sunny Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow moderate Temp. _____ pH _____

Width 20 ft. Depth 2 ft. O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

clear - sandy bottom

Shore willows -

P. acutissimus 107 II, 1 juv ♀

O. crockeri (?) 1 juv ♀, 1 ♀ with eggs

C. striatus var. 307 II, 2 ♀♀, 2 juv ♀

No. 4-1860-8a, 8b, 8c, 8d
Sturgis

Date Apr. 18, 1960

Co. Choctaw

St. Miss.

Locality 6 miles W. of Okibbeha - Choctaw
co. line, St. Hy. 12

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 4:40 Weather sunny Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow sluggish Temp. _____ pH _____

Width 2 ft. Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore Swampy

43 P. b. acutus - 10♂ I, 1♀, 19 juv ♂, 22 juv ♀

25 P. vires-viridis 10♂ I, 13 ♂ II 10♀, 1 juv ♂

20 C. cristatus 70♂ II, 13♀

1
89 C. striatus 10♂ II 1 juv ♀

No. 4-1860-8
Ackerman

53.6
45.7
7.9

2 - *mr. H. valliculus* ?
type loc.

Date apr. 18, 1960

Co. Choctaw

St. Miss.

Locality 7.9 mi. s. w. of Ackerman, H. Hg. 12.
roadside ditch

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 5:00 Weather sunny Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore _____

No. 4-1960-1a, 1b
Kosciusko

Date Apr. 19, 1960
Co. Attala
St. Miss.

Locality 3.2 mi. S. of junction of St. Hys.
35 + 14, on Hy. 35.

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 7:45 AM Weather _____ Rel. Humidity _____ Temp. _____

Terrain clear water

Geological Formation _____

Turbidity _____ Flow sluggish Temp. _____ pH _____

Width 4-6 ft. Depth 2 ft. O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom sand + clay

Shore sweet gum, tulip poplar, willow

P. blandingii acutus 2♀, 1 juv ♂, 3 juv ♀

C. striatus 1♀, 5 juv ♂, 4 juv ♀

Carthage $\frac{209.0}{11.9}$

No. 4-1960-2
Walnut Grove

Date Apr. 19, 1960

Co. Leake

St. Miss.

Locality 11.9 mi. s. of Carthage, St. Hy. 35

wet weather pool in pasture lands, very cloudy water

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 9 A.M. Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth 1 1/2 O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

tall diogenes chimneys in adjacent field

Shore _____

P. b. autus 307I, 19 jw 07, 14 jw 2

(36)

29.8
21.2
8.6

No. 4-1960-3
Forest

Date Apr. 19, 1960

Co. Scott

St. Miss.

Locality 8.6 mi. s. of Leake - Scott Co. line,
St. Hy. 35

tiny roadside ditch

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 9:25 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width 5 Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

12 ft. long -
clay, silty bottom

Shore _____

(25)

C. b. acutus 5♂I, 4♂II, 9♀, 2♂juv, 5♀juv

No. 4-1960-4
Forest

34.2
21.2
13.0

Date Apr. 19, 1960

Co. Scott

St. Miss.

Locality 13 mi. s. of Lake - Scott Co. line, St.
By. 35

Roadside ditch

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 9:50 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom clay

Shore farm lands

P. b. acutus 607I, 607II, 4♀, 3 imm ♀

No. 4-1966-5
Forest

Date Apr. 19, 1960
Co. Rankin
St. Miss.

Locality 1.5 mile from Scott-Rankin Co. line
U. S. 80

small borrow pit - dark water

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time _____ Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom blue clay

Shore _____

P. blandingii acutus

207 I, 307 II, 10 ♀, 4 juv ♂, 3 juv ♀

No. 4-1960-6a, 6b
Forest

Date Apr. 19, 1960

Co. Rankin

St. Miss.

Locality 9 mile from Scott-Rankin Co. line
U.S. 80

sluggish stream - cloudy water

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time _____ Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width 4¹² ft. Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom clay

Shore P. b. acutus 107 I

C. striatus 109 juv.

11.2 mize

No. 4-1960-7a, 7b
mize

Date Apr. 19, 1960

Co. Smith

St. Miss.

Locality In city limits of Mize, on St. Hy. 35
Borrow pit + burrow

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 1:10 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore P. b. acutus 207 I, 107 II, 24, 207 juv

Cambarus sp. 1 ♀, 3 juv 07, 1 juv ♀

50.2 Co. line
22.2
28

No. 4-1960-8
Cellaris

Date Apr. 19, 1960
Co. Covington
St. Miss.

Locality 28 miles s. of Mt. Olive, U.S.
Hy. 49 - just yards n. of Covington -
Forest Co. line - Roadside ditch

Quadrangle _____ Elevation _____ Atm. Pr. _____

Time 2:45 Weather _____ Rel. Humidity _____ Temp. _____

Terrain _____

Geological Formation _____

Turbidity _____ Flow _____ Temp. _____ pH _____

Width _____ Depth _____ O₂ _____ CO₂ _____

M. O. Alk. _____ Phenolphthalein Alk. _____

Bottom _____

Shore _____

P. b. acutus 107II, 3♀♀

Date 14 June 60 Cat. No. 60-1 6-1460-1a, 1b

P. C. Jonesboro Co. & State Arkansas Craighead Co.

Locality Small stream ca. 5 mi. NW of Jonesboro on
US Rt. 63 at Ernest Robert's Grocery Store

Quadrangle _____ Elevation _____

Water: Cloudy, turbid, oily Flow sluggish

Width 3 ft Depth 1.5 ft pH _____ Temp. 27°

Bottom silty

Stream Vegetation None

Shore Vegetation Salix, Pinus, Quercus, Juniper

Air Temp. 75°C

Weather Fair to Cloudy Time 10:45 AM

Method of Capture _____

Preservative _____

Collected by: _____

General Notes:

Orconectes palmeri palmeri 1♂I, 1♂II, 4♂♂juv., 4♀♀juv.
Cambarus diogenes 4♀♀juv.

Date 14 June 60 Cat. No. 60-2P. C. Springfield Co. & State Missouri: Greene Co.Locality Sac River 3.2 mi. north of Springfield on
State Rt. 13Quadrangle — Elevation —Water: Clear Flow MedWidth 20 ft Depth .5 f pH — Temp. 24°CBottom RockyStream Vegetation Assorted AlgaeShore Vegetation Salix, PlantainsAir Temp. 80°FWeather Fair Time 5:00 P.M.Method of Capture SeinPreservative FormalinCollected by: Crawford

General Notes:

Orconectes nais 1♂II, 2♀♀, 7♂♂juv., 1♀juv.

Orconectes neglectus neglectus ?? 2♂♂II, 1♀,

Date 15 June 60 Cat. No. 60-3P. C. Topeka Co. & State ^{Shawnee} KansasLocality Intermittent stream on state rt. 18 -
12 mi. west of TopekaQuadrangle — Elevation —Water: Clear Flow SluggishWidth 3 ft Depth 1.5 ft pH — Temp. 35°CBottom SiltyStream Vegetation TyphaShore Vegetation Salix, TyphaAir Temp. 100°FWeather Fair Time 12:20 P.M.Method of Capture SeinPreservative FormalinCollected by: Crawford

General Notes:

O. nais - 4[♂] II, 4[♀], 18[♂] juv.; 10[♀] juv.

P. gracilis - 10 juv.

Date 3 July 60 Cat. No. 60-4
P. C. Coquille Co. & State Oregon
Locality North Fork of Coquille River on Upper North
Fork Road Ca. 2.5 mi. upstream from Laverne Park

Quadrangle — Elevation —

Water: Clear Flow Sluggish

Width 30-40 f Depth 3-10 ft pH — Temp. —

Bottom Gravel to clay

Stream Vegetation —

Shore Vegetation —

Air Temp. —

Weather Fair Time —

Method of Capture —

Preservative By Hand -

Collected by: de Roth, G.C.

General Notes:

Pacifastacus trowbridgii 2♂♂, 2♀♀, 1 juv.♂

Date Sept. 20, 1960

Cat. No. 60-9

P. O. Tamestown

Co. & State No. Dakota

Locality Pepestem Creek near junction of James River
in Klaus Park within city limits of Tamestown

Quadrangle _____

Elevation _____

Water: _____

Flow _____

Width _____

Depth _____

pH _____

Temp. _____

Bottom _____

Stream Vegetation _____

Shore Vegetation _____

Air Temp. _____

Weather _____

Time _____

Method of Capture Hand and sein

Preservative Formalin

Collected by: Laurence J. Tilly - Biol. Dept. Tamestown College

General Notes:

6-1560-2

Date _____ Cat. No. 60-9

P. C. James town Co. & State No. Dakota

Locality _____

Quadrangle _____ Elevation _____

Water: _____ Flow _____

Width _____ Depth _____ pH _____ Temp. _____

Bottom _____

Stream Vegetation _____

Shore Vegetation _____

_____ Air Temp. _____

Weather _____ Time _____

Method of Capture _____

Preservative _____

Collected by: Tilly, Lawrence

General Notes:

Orconectes virilis 1♂I, 2♂♂juv., 1♀juv.

Date 10 July 60 Cat. No. 60-5
P. C. Reedsport Co. & State Douglas - Oregon
Locality Umpqua State Park Lake

Quadrangle — Elevation —

Water: Clear Flow —

Width — Depth — pH — Temp. —

Bottom Rocky to Sandy

Stream Vegetation —

Shore Vegetation —

Air Temp. —

Weather — Time —

Method of Capture By Hand

Preservative Formalin

Collected by: Stombaugh, T. A. & Allen, Chas.

General Notes:

Pacifastacus trowbridgii 1♂

E-1960-1

Date 19 August 60 Cat. No. 60-6

P. O. Mt. Rushmore Co. & State So. Dakota

Locality Spring Creek on US Rt. 16 at junction of Rt. 16
and Rt. 385

Quadrangle — Elevation —

Water: Clear Flow Sluggish

Width 10 ft Depth 1 ft. pH — Temp. 21°C

Bottom Rocky to Silty

Stream Vegetation Assorted Algae, Juncus

Shore Vegetation —

Air Temp. 80°

Weather Fair Time 2:30 P.M.

Method of Capture Sein

Preservative Formalin

Collected by: Crawford & Crawford

General Notes:

Oreochetes immanis 1♂I, 6♂II, 5♀, 6♂juv, 8♀juv.

8-2160-1

Date 21 Aug 60 Cat. No. 60-7
P. C. Weaver Co. & State Minnesota

Locality Snake Creek between Weaver & Kellogg on
US Rt. 61 - 4.5 mi. north of Weaver -
Miss drainage

Quadrangle — Elevation —

Water: Clear Flow Sluggish

Width 10 ft Depth 1.5 ft pH — Temp. 26°

Bottom Silty

Stream Vegetation Juncus

Shore Vegetation Salix, Platanus

Air Temp. 72°

Weather Fair Time 2:30 PM

Method of Capture Sein

Preservative Formalin

Collected by: Crawford & Crawford

General Notes:

Cambarus diogenes 500 juv., 200 juv.

Date Aug 23, 1960 Cat. No. 60-8P. C. Scottsburg Co. & State IndianaLocality Small (unnamed) stream on US Rt. 31
4.6 mi. south of ScottsburgQuadrangle — Elevation —Water: Clear Flow sluggishWidth 3 ft Depth .5 ft pH — Temp. 24°CBottom Silty to sandyStream Vegetation NoneShore Vegetation Platanus, Typha, SalixAir Temp. 82° FWeather Fair Time 10:30 AMMethod of Capture SeinPreservative FormalinCollected by: Crawford & Crawford

General Notes:

Orconectes sloani 1♂I, 11♂♂II, 7♀♀

Date Oct. 21-60 Cat. No. 60-10 10-2160-1a,1b

P. C. Madison Co. & State Wisconsin

Locality Gardner Pond in University Arboretum

Quadrangle — Elevation —

Water: — Flow —

Width — Depth — pH — Temp. —

Bottom —

Stream Vegetation —

Shore Vegetation —

Air Temp. —

Weather — Time —

Method of Capture Turtle Trap

Preservative Formalin

Collected by: Elizabeth Middleton & Kathy Ream

General Notes:

O. virilis 1♂I, 2♀♀

C. diogenes 1♂I

11-2860-1a, 1b, 1c
Date Nov. 28, 1960 Cat. No. 60-11

P. C. Kodak Co. & State Perry - Kentucky

Locality Montgomery Creek in village of Kodak
Kentucky R. blr.

Quadrangle — Elevation —

Water: Clear Flow Moderate

Width 12 ft Depth 1.5 ft pH — Temp. —

Bottom Rocky to sandy

Stream Vegetation —

Shore Vegetation Platanus, Salix, Betula, Quercus

Air Temp. —

Weather — Time —

Method of Capture By Hand

Preservative Isopropyl Alcohol

Collected by: Kenneth Colwell

General Notes:

O. juvenilis 1st I, 1st
C. carolinus 1st I
C. robustus 3rd II, 2nd

No. A-1561-1

Date _____

White Sulphur SpringsCo. & State Greenbrier Co., W. Va.

180.1

Loc. 3.4 mi E. of White Sulphur Spgs. on U.S.
Rt 60, Wades Creek.Water clear

Flow _____

Width 10-15Depth 6"

pH _____

Temp. _____

Bottom rocks some siltVegetation noShore Tsuga, Pinus, Acer,

Air Temp. _____

Weather clearTime 1205Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. b. bartonii</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>3</u>		
<u>a heterogeneous population</u>							

(9)

183.5. White Sulphur Springs.Lucker Ck, 6 mi N. of Elizabeth, Wirt Co., W. Va.

No. 4-1561-2 etc.

Date _____

Co. & State

Greenbrier Co., W. Va.

1.89.2 Loc. 5.7 mi W. of White Sulphur Sprs. on
Rt. 60 (Howard's Cr.) 0.9 mi E. of
5.7 Caldwell.

Water clear.Flow swiftWidth 30-40

Depth

2'

pH _____

Temp. _____

Bottom RockyVegetation no.Shore Platanus, Betula, Acer.

Air Temp. _____

Weather overcast

Time _____

Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
Ⓐ <i>C. charmodactylus</i>			5	1	1		
Ⓑ <i>C. bartonii</i>			1				
Ⓒ <i>O. p. sankarni</i>				1	5		

(14)

Caldwell 190.1 ^{at} Bridge

189.2

.9

Roncencut 198.9.

Jct. 763 + 219.

Lewisburg 193.9 ^{turn around} - 194.3.

No. 4-1561-3

Date _____

Co. & State

Greenbrier Co., Va.204.6 Loc. 5.7 mi W. of Rancecort on St Hy 63.At rd to Fl. Spring - near junction of stream
with Greenbrier R.Water Slightly cloudy - greenish Flow swiftWidth 20-40 Depth + 3' pH _____ Temp. _____Bottom rockyVegetation noneShore Platanus, Liquidambar, Alnus.

Air Temp. _____

Weather overcast cloudy Time 2:20Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. b. carinirostris</u>		11	7	7	7		

(32)

204.6

198.9

5.7

211.3 Alderson

212.7 Sumner's Co. Lake.

No. 4-1561-4

Date _____

AldersonCo. & State Summers Co. W. Va.213.2 Loc. 1.5 mi W. of Summers Co Line, 1.9 mi NW
of Alderson on Rt 63. within 200 yds of
Mouth of Creek to GreenbrierWater cloudy Flow modWidth 6 Depth 6" pH _____ Temp. _____Bottom sand rocky & silt at edgeVegetation no.Shore In pasture a few willows & Platanus

Air Temp. _____

Weather cloudy variable Time 3:45

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
2 jars - *O p. santorii x erismophorus	9			18	14	1	
O. bartonii	1		2	2	1		

(47)

62

$$\begin{array}{r} 13.2 \\ 212.7 \\ \hline .5 \end{array}$$

$$\begin{array}{r} 13.2 \\ 211.3 \\ \hline 1.4 \end{array}$$

*two males typical erismophorus
one " intermediate
remaining santorii

$$\begin{array}{r} 18 \\ 14 \\ 9 \\ 6 \\ \hline 47 \end{array}$$

H-1561-5

Date

Alderson

Co. & State Summers Co., W. Va.

Loc. ^{Ck.} 7.9 mi W. of Alderson on St Rt 63

219.2
211.3
7.9
at Homers Prison - collections made within
200 yds from jet of Ck with ~~freedom~~ R.

Water clear Flow mod

Width 1-3' Depth 4" pH Temp.

Bottom

Vegetation none

Shore Quercus Acer

Air Temp.

Weather slightly cloudy Time 4:30

Capture

Det. Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. bartonii</u>			1	2	2		

(5)

223.8 Talcott

No. 4-1561-6

Date _____

DalcottCo. & State Summers Co., W. Va.227.3 Loc. 3.5 mi W. of Dalcott on Rt 63.Stream within 200 yds of junction with
Greenbrier R.Water clear tumbling over rocks Flow swift.Width 6-10 Depth 8" pH _____ Temp. _____Bottom RockyVegetation none.Shore Bagus, Platanus, Alnus.

Air Temp. _____

Weather sunny. Time 4:55

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
① <i>C. bartonii</i>	4	5	2	2	5			
② <i>C. robustus</i>			2					
								(20)

27.3

23.8

3.5

No. 4-1561-7

Date _____

Jumping Branch

Co. & State Summers Co, W. Va.

242.6 Loc. .1 mi E of Raleigh Co. line on Rt 3

Water clear Flow tumbling

Width 1-2' Depth 4" pH _____ Temp. _____

Bottom bed rock

Vegetation none

Shore oak, maple

Air Temp. _____

Weather clear Time 5:30

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. b. bartonii</u>			<u>1</u>					
<u>broad sq rostr.</u>								

(1)

Raleigh Co. line
272.6,

No. 4-1561-8

Date _____

15 ● 4 BeckleyCo. & State Raleigh Co. W. Va.Loc. 6 mi E. of Beckley on Rt 3. Deep river
stream (flowing to right of road)Water clear Flow mod swiftWidth 6' Depth 1' pH _____ Temp. _____Bottom rock + sandVegetation noneShore Cornus, Acer, Quercus, Pinus, Tsuga

Air Temp. _____

Weather clear Time 6:35Capture Seines

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. b. bartonii</u>		<u>7</u>	<u>1</u>	<u>3</u>	<u>10</u>			

No. 4-1661-1a, 1b.

Date _____

Fayetteville

Co. & State Fayette Co., W. Va.

280.6 Loc. 3 mi S. Fayetteville (Stream)
on Rt 21

Small meandering stream heavily wooded, flooded

Water muddy

Flow mod.

Width 10'

Depth +3

pH _____

Temp. _____

Bottom mud & clay

Vegetation 201

Shore Quercus

Air Temp. _____

Weather cloudy

Time 11:20

Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. propinqua</u>		1	2				
<u>C. b. bartonii</u>			2				

(5)

No. H-1661-2

Date _____

Jay'svilleCo. & State Fayette Co., W. Va.283.0 Loc. At south city limits of Jay'sville
on Rt 21, Creek flooded.Water slightly cloudy Flow rapidWidth 15 Depth 2 pH _____ Temp. _____Bottom sand rockVegetation noShore Liriodendron, Cornus, Quercus, AcerRhododendron abundant Air Temp. _____Weather cloudy Time 12:20Capture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>Crb. bantonii</u>		<u>3</u>	<u>2</u>	<u>6</u>	<u>1</u>			

(12)

283.6 Jay'sville

No. 4-1661-3

Date _____

Beckwith

Co. & State Myette Co, W. Va.

Loc. Laurel Ck + tributary at
Beckwith - Both flooded

Water muddy Flow swift

Width 30 Depth - 2+ pH _____ Temp. _____

Bottom rocky

Vegetation none

Shore Platanus, Tsuga -

Air Temp. _____

Weather sunny Time 12:55

Capture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. b. bartonii</u>		<u>1</u>	<u>2</u>					

(3)

Gauley Bridge 297.9

No. 4-1661-4

Date _____

LizemoresCo. & State Clay Co., W. Va.Loc. Trib to Gauley R, 3.6 mi S. of Lizemores308.9 on Rt 16Water clear Flow rapidWidth 12 Depth 6 pH _____ Temp. _____Bottom rockyVegetation no.Shore Platanus, Tsuga, Fagus, Rhododendron

Air Temp. _____

Weather overcast Time 2:30

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. b. bartonii</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>		

Possibly two distinct forms
 united here.
 check rostrum + areola.

Phlox here.

312.5 Lizemores
308.9
 3.6

(8)

No. 4-1661-5a, 5b, 5c Bottles Date _____
Lizemer Co. & State Clay Co., W. Va.

313.4 Loc. 9 mi N. of Lizemer on Rt 16 + Spring
run -

Water slightly cloudy Flow swift

Width 12' Depth 1' pH _____ Temp. _____

Bottom rocky

Vegetation none

Shore Platanus, Tsuga, Liriodendron Rhododendron

Air Temp. 9.5

Weather Sunny & snowing Time 4:15

Capture Hand Seine

Det.	Coll.						
	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O.</u>							
<u>O. propinquus saxborii</u>	<u>3</u>		<u>13</u>			<u>1</u>	
<u>C. robustus</u>	<u>2</u>	<u>6</u>	<u>7</u>	<u>3</u>	<u>9</u>		
<u>C. b. bartonii</u>			<u>1</u>		<u>8</u>		

(45)

17
27
44

312.5

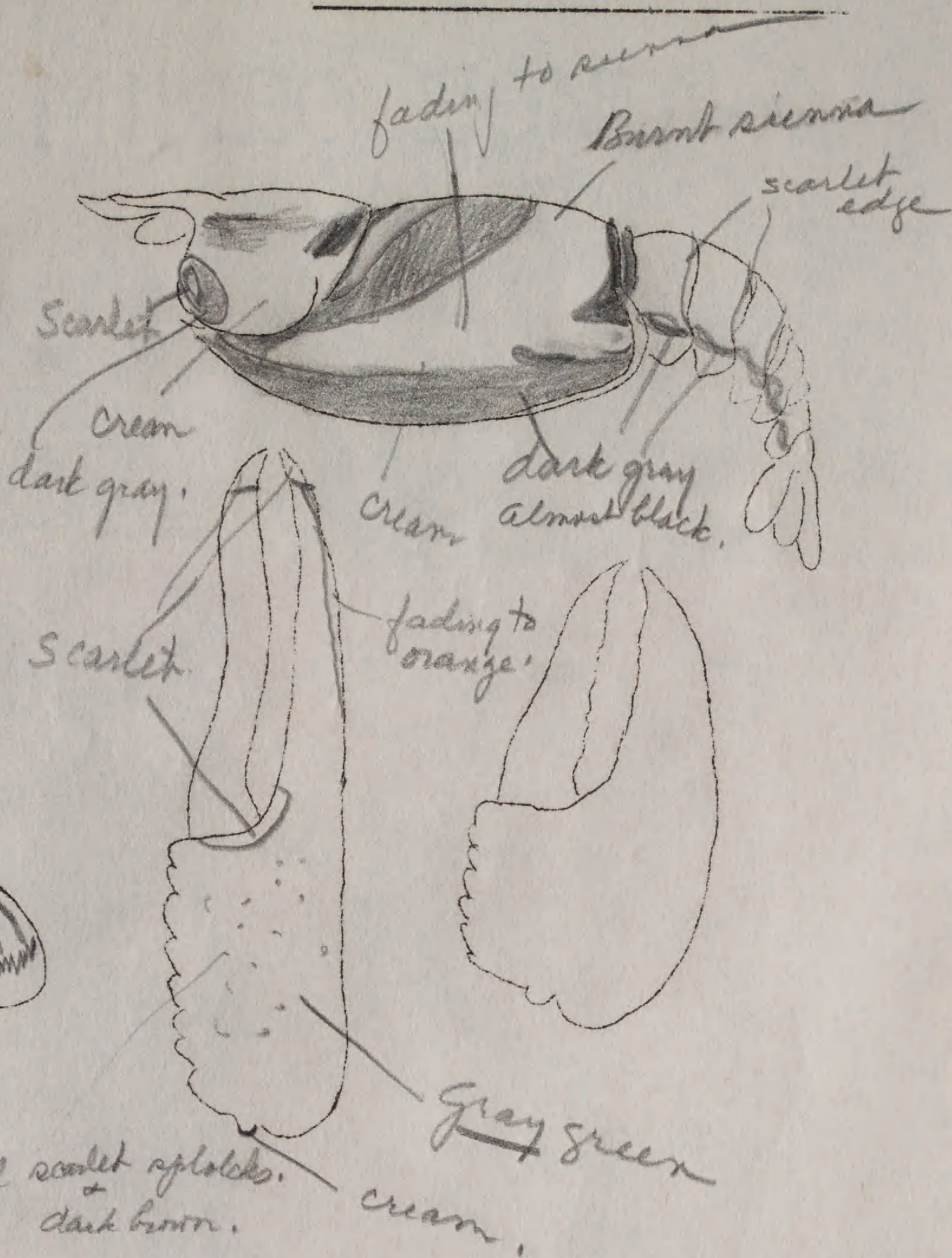
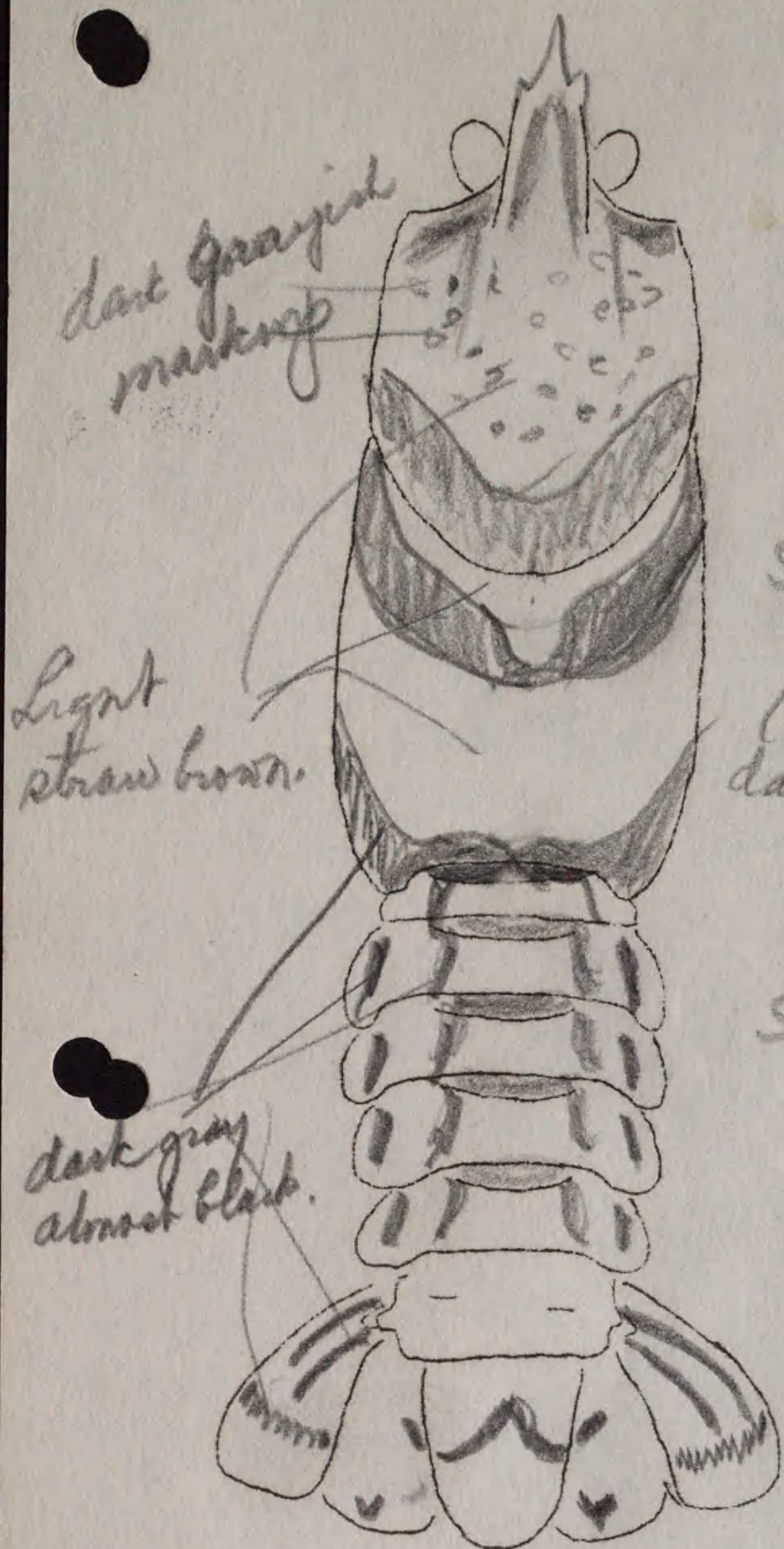
9/10

314.4 Indore

Species _____

No. 4-1661-5

Locality _____



No. 4-1661-6Hartland.

2 jars

Date _____

Co. & State

Clay Co. W. Va320.2 Loc. Stream - 3.1 mi S. of Hartland on Rt 16Water slightly cloudy

Flow

swift

Width

15'

Depth

1'

pH

Temp.

Bottom

rocky

Vegetation

none

Shore

Sage, Potatoes, Rhododendron

Air Temp.

Weather

overcast

Time

4:45

Capture

seine

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. robustus</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>8</u>	<u>5</u>		

(18)

323.3 Bridge over Elk R
at Hartland

327.2 Clay

No. 4-16661-7a, 7b

Date _____

ClayCo. & State Clay Co., W. Va.334.7 Loc. 7.5 mi W. of Clay on Rt 4 Trib to
Burrill CtWater slightly cloudy Flow swiftWidth 10' Depth 1' pH _____ Temp. _____Bottom rocky sandVegetation noneShore Platanus, Cornus, Botula

Air Temp. _____

Weather overcast Time _____Capture seines

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<i>O. propinquus carolinensis</i>	1	1	2					
<i>C. robustus</i>	1	1	2	7	3			

(18)

3347

327.2

75

No. 4-1461-8

Date _____

WaltonCo. & State Roane Co., W. Va.

362.5

Loc. Left-hand Creek,
12.3 mi N. of Clendering (turning N.)
on Rt 119. 1.6 mi S. of WaltonWater slightly cloudy Flow _____Width 6-8 Depth 1' pH _____ Temp. _____Bottom sand & rock gravelVegetation noneShore Fagus, Acer.

Air Temp. _____

Weather clearing Time 6:35Capture none

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>Oporinus xerismorphus</u>	<u>3</u>	<u>1</u>	<u>2</u>		<u>1</u>		

(7)

Colored like
Oreocetes on 4-1561-4350.2 Clendering.
355.1 Roan Co line.

364.1 Walton

407.2 Ripley

$$\begin{array}{r} 641 \\ 3625 \\ \hline 16 \end{array}$$

No. 4-1761-1

Date _____

Pee-weeCo. & State Jackson Co., W. Va.420.8 Loc. 3.4 mi E of Rt 21 on Road to PalestineCreek flows W. (5.8 mi W. of Pee-wee.)Sub of Little Kanawha R. (K. Fork, ~~Peewee~~ Ch 2)Water slightly cloudy Flow swift to rockWidth 10-12 Depth 1 pH _____ Temp. _____Bottom rock + sandyVegetation noneShore Platanus + Pines in farming area.

Air Temp. _____

Weather overcast Time 10:00 AMCapture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. p. sanborni</u>	<u>3</u>		<u>4</u>					

(7)

413.0 Sandy ck.

417.4 Palestine Rk.

426.6 Pee-wee

220.8
6.8

No. 4-1761-2

Date _____

Pee Wee

Co. & State Wirt Co., W. Va.

Loc. Stream at Pee Wee. Crament Ck.

Water slightly cloudy Flow swift

Width 15 Depth 1 pH _____ Temp. _____

Bottom gravel

Vegetation none

Shore Platanus, Juglans nigra, ^{Salix} cultivated area Air Temp. _____

Weather overcast windy Time _____

Capture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. p. erismorphus</u>	<u>3</u>	<u>2</u>	<u>4</u>					

(9)

427.0. Pee Wee

No. H-1761-3a, 3b

Date _____

PeeweeCo. & State Wirt Co., W. Va.432.0 Loc. Sargeant's Run 5 mi NE. Peewee.
Tribe Ho West Run ck (?)Water clear Flow _____Width 4-6 Depth 6" pH _____ Temp. _____Bottom rockyVegetation noneShore Platanus cultivated land

Air Temp. _____

Weather snowing Time 10:45Capture Seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. robustus</u>	1		1	2	2			
<u>C. b. laevis</u>			1					

(7)

435.0 Palestine

438.4 Elizabeth

443.8 Elizabeth

No. 4-1761-4a, 4b, 4c.

Date _____

Co. & State West Co., W. Va.Loc. Jucker Cr., + small trib. 4.9 mi W.

448.7

Elizabeth on Morristown Rd.Water muddy, c/c clearFlow swift with rapidsWidth 20-30' 6-8'Depth +3

6"

pH _____

Temp. _____

Bottom gravel sandVegetation noneShore Platanus, Salixcultivated landAir Temp. 6°Weather light snow.Time 12:45Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. p. erimophorus</u>	<u>2</u>		<u>1</u>				
<u>C. robustus</u>		<u>3</u>	<u>2</u>	<u>1</u>	<u>5</u>		
<u>C. b. laevis</u>		<u>3</u>	<u>2</u>	<u>3</u>	<u>2</u>		

(24)

48.7
 43.8

 4.9

No. 4-1761-5a, 5b, 5c

Date _____

Elizabeth

Co. & State

West Co., W. Va.452.2 Loc. Lucker ck. 8.4 mi. upstream from
Elizabeth.Water slightly cloudy

Flow

swift

Width

6-10

Depth

+2

pH

Temp.

Bottom

bed rock, sand, gravel.

Vegetation

none

Shore

Salix Platanus Quercus

Air Temp.

Weather

morning

Time

1:35

Capture

seine

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>D. p. erismophorus</u>	<u>3</u>						
<u>C. robustus</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>1</u>		
<u>C. b. laevis</u>		<u>1</u>					

(13)

452.2
 4438
 8.4

Reply 476.1

No. 4-1761-6a, 6b
Pt. Pleasant

Date _____
Co. & State Jackson Co, W. Va

489.3 Loc. at Jackson Mason Co line on Rt 2,
16.3 mi

Water cloudy Flow rapid

Width 10' Depth 1' pH _____ Temp. _____

Bottom rocky

Vegetation no

Shore Plateaus, Sand

Air Temp. _____

Weather overcast Time 3:30

Capture Seine

Det.	Coll.						
	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. p. sanborni</u>	<u>2</u>	<u>2</u>		<u>6</u>	<u>4</u>	<u>2</u>	
<u>C. b. laevis</u>		<u>2</u>		<u>2</u>	<u>2</u>		

No. 4-1761-7a, 7b

Date _____

Pt. PleasantCo. & State Marion Co., W. Va.Loc. Type 8 mi E. of Pt. Pleasant on Sh Hy 2
Small stream.Water clear Flow mod.Width 5' Depth 8" pH _____ Temp. _____Bottom sand, gravel scattered flat stonesVegetation noneShore Salix, Tuplans niger

Air Temp. _____

Weather overcast snow flurryTime 3:55Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<i>Op. sanborni</i>			1			1	
<i>C. bartonii subsp.?</i>	1			5	2		

(10)

505.6 Pt Pleasant.

489.3

163

4-1761-8
Gallipolis

Date _____

Co. & State Gallia Co., Ohio

515.5 Loc. 5.5 mi N.W. of Gallipolis on Rt 35.

Water cloudy Flow mod.

Width 6-8 Depth + 2 pH _____ Temp. _____

Bottom clay

Vegetation none

Shore Platanus, Gliditeia

Air Temp. _____

Weather Rainy Time 5:00

Capture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. p. ranhursi</u>	<u>6</u>	<u>9</u>	<u>7</u>	<u>1</u>	<u>5</u>	<u>3</u>		

(31)

510.0 Gallipolis, Ohio.

No. 4-1761-9a, 9b

Date _____

~~Old Hill~~ Rocky Hill Co. & State Jackson Co., Ohio529.8 Loc. 1/2 S. of Rocky Hill on U.S. Hwy 35
Small stream along roadsideWater cloudy Flow sluggishWidth 2-4' Depth 6-1 pH _____ Temp. _____Bottom sand, clayVegetation noneShore Ulmus

Air Temp. _____

Weather overcast Time 5:35

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. p. sanborni</u>					1			
<u>C. b. laevis</u>		1	3	2	2			
								(9)

36
29.8
6
Jackson 543.5
Pike Co line 553.9

No. H-1761-10

Date _____

Beaver.Co. & State Pike Co, Ohio555.1 Loc. "Swift Ck" at eastern city limits of BeaverWater clear Flow swift at upperWidth 20' Depth + 2 pH _____ Temp. _____Bottom gravel + sandVegetation noneShore Slope cultivated land

Air Temp. _____

Weather cloudy Time _____

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. p. sanborni</u>	<u>1</u>	<u>5</u>	<u>2</u>			<u>2</u>		
								<u>10</u>

Beaver 555. 4

Loc. H-1861-1a, 1b, 1c

Date _____

Harrison

Co. & State Lewis Co., Ky.

601.6 Loc. 2.5 mi. E. of Harrison large clear stream
Rt 10

Water clear Flow swift

Width 15 - 20 Depth 2 pH _____ Temp. _____

Bottom Rocky

Vegetation no

Shore Carya, Liquidambar, Platanus

Air Temp. _____

Weather overcast Time 10:55

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>D. juvenilis</u>			1				
<u>C. robustus</u>		1	4	3	2		
<u>C. bartonii subsp</u>				1			

604.1 Harrison

No. 4-1861-2a, 2b

Date _____

Charters

Co. & State

Lewis Co., Ky623.0 Loc. 2.7 mi W. of Charters - Little Salt Lick
Ck. Rt. 10Water slightly cloudy Flow swiftWidth 15' Depth 1' pH _____ Temp. _____Bottom rock, gravel, sandVegetation noneShore none cultivated land pasture

Air Temp. _____

Weather cloudyTime 11:55Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. juvenilis</u>	<u>3</u>				<u>1</u>	<u>2</u>	
<u>C. bartonii subsp.</u>	<u>2</u>		<u>2</u>	<u>1</u>	<u>1</u>		

613.6 Vanceburg

621.3 Charters

No. 4-1861-3

Date _____

Rectorville

Co. & State Mason Co., Ky.

638.9 Loc. 3.4 mi W of Rectorville on Rt 18
Stream

Water clear Flow slight

Width 3-5' Depth 6" pH _____ Temp. _____

Bottom rock & silt

Vegetation none

Shore Acer, Cercis, Carya, Ulmus

Air Temp. _____

Weather cloudy Time 12:45

Capture sew

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. b. laevis (?)</u>			<u>1</u>	<u>2</u>	<u>1</u>		

627.6 Rihalt

631.2 Lellersboro

634.5 - Mason Co line

635.5 Rectorville

No. 4-1861-4a, 4b

Date _____

Maysville

Co. & State

Morgan Co., Ky.

Loc.

Lawrence Creek, 3.7 mi W of Maysville
on Rte 10.

Water

slightly cloudy

Flow

mod. swift

Width

30'

Depth

+ 2

pH

Temp.

Bottom

Rocky

Vegetation

none

Shore

Platanus, Celtis, Salix

Air Temp.

Weather

cloudy

Time

1:50

Capture

seine & Hand.

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. r. rusticus</u>	<u>6</u>	<u>2</u>	<u>1</u>			<u>1</u>	
<u>C. bartonii subsp.</u>			<u>1</u>				

6442 Locking R. at Falmouth.Maysville644.837Kennamantown 657.7 ColoneBrookside 665.4Powersville 668.9Wallon 671.8Neave 674.8

No. 4-1861-5a, 5b, 5c, 5d 2 jars

Date _____

Halbrook

Co. & State

Grant Co,

Ky

Loc. Rattlesnake Ck trib. to Eagle Ck, 4.3 mi. N.E. of Halbrook.

Water clear

Flow sluggish

Width 12

Depth 8"

pH _____

Temp. _____

Bottom rock

Vegetation none

Shore Aces, Platanus Borealis, Juglans.

Air Temp. _____

Weather overcast

Time 5:25

Capture Seine Hand

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. diogenes var</u>						4	
<u>C. ornatus</u>		3	1	3	1		
<u>C. ortmanni?</u>	1	1	1	3	2		
<u>O. r. rusticus</u>	5			3	4	3	

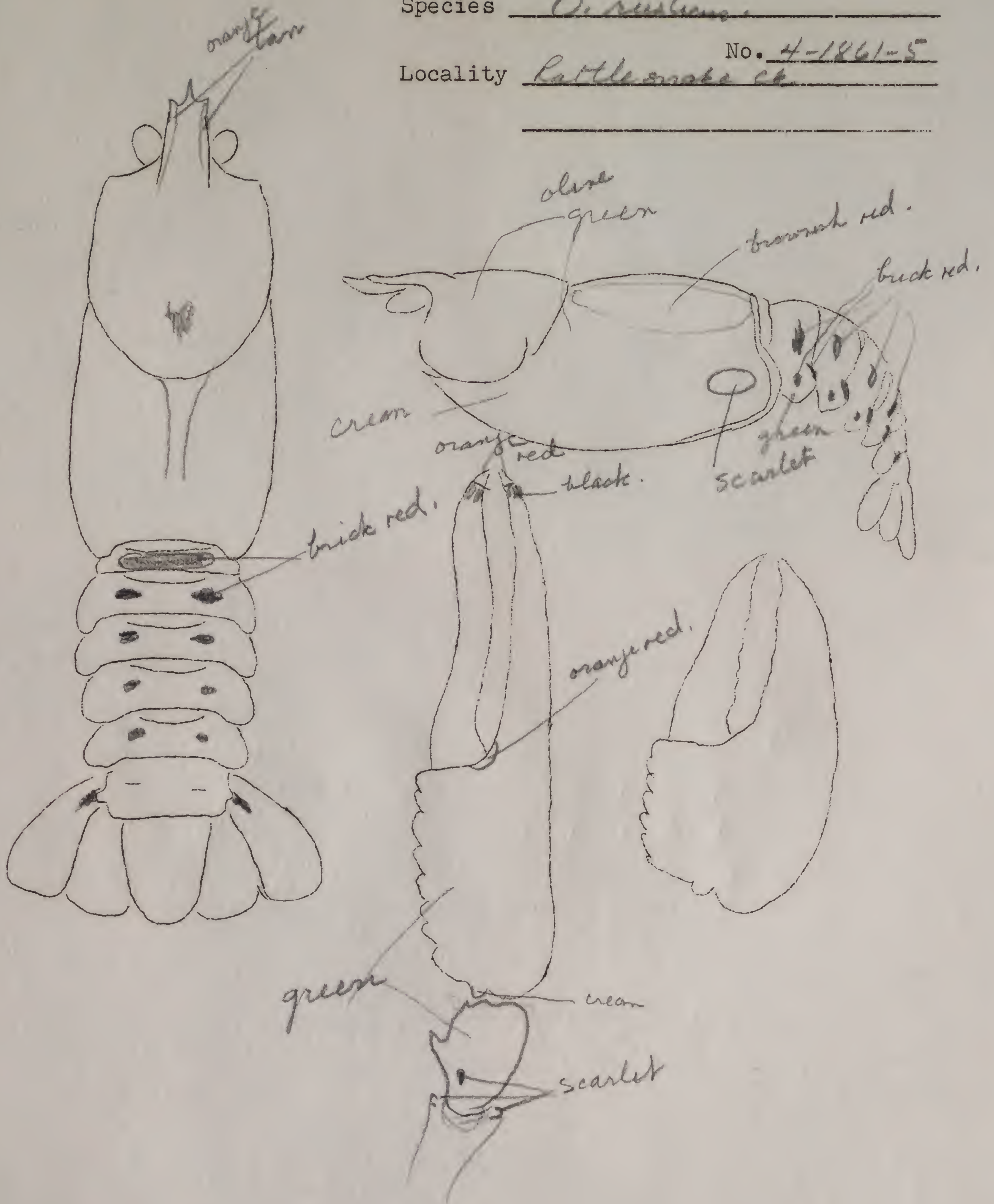
718.6 Halbrook
14.3

729.2. Owenton

Species *O. rufus*

No. 4-1861-5

Locality Rattle snake ct.

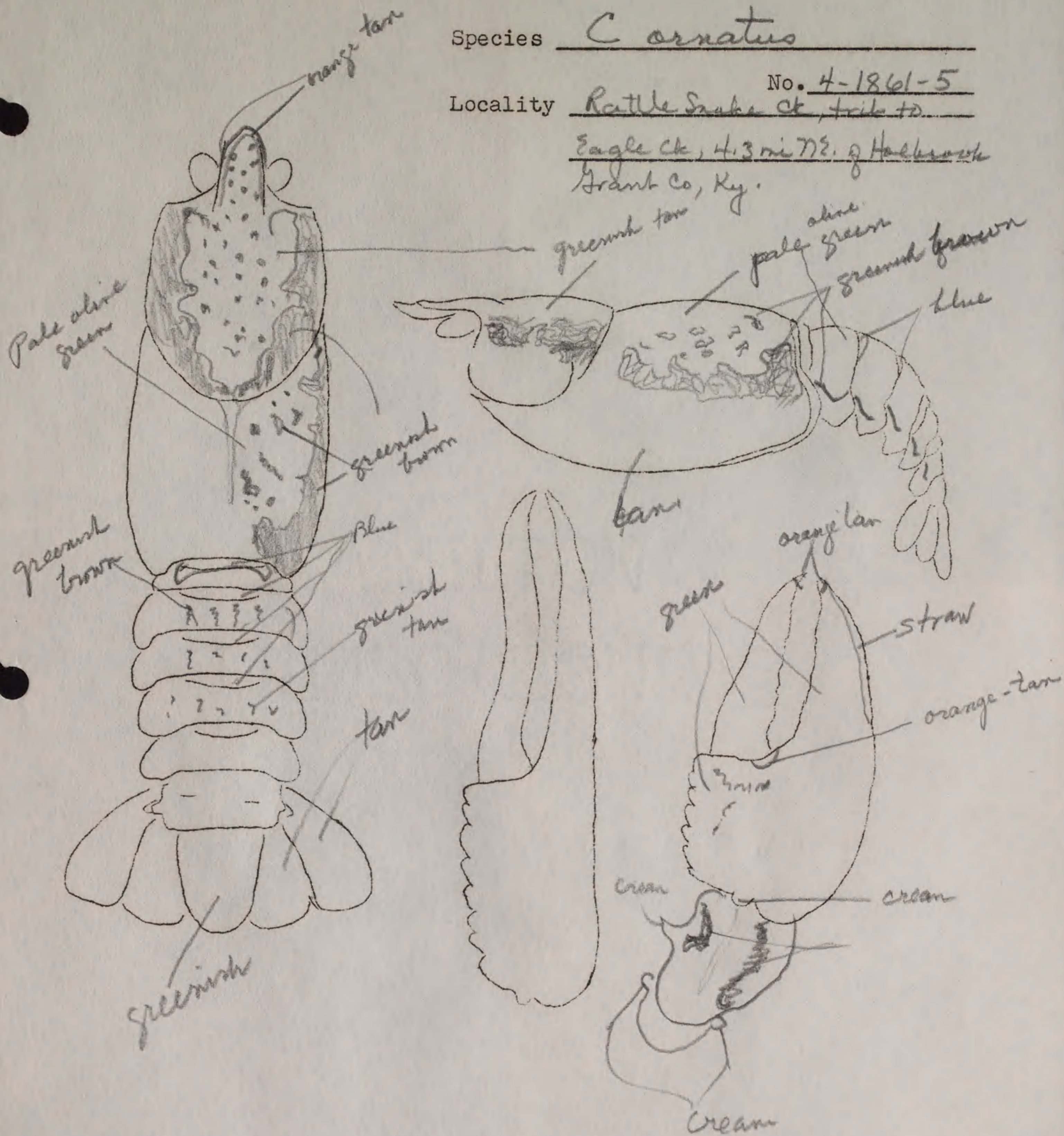


Species C ornatus

No. 4-1861-5

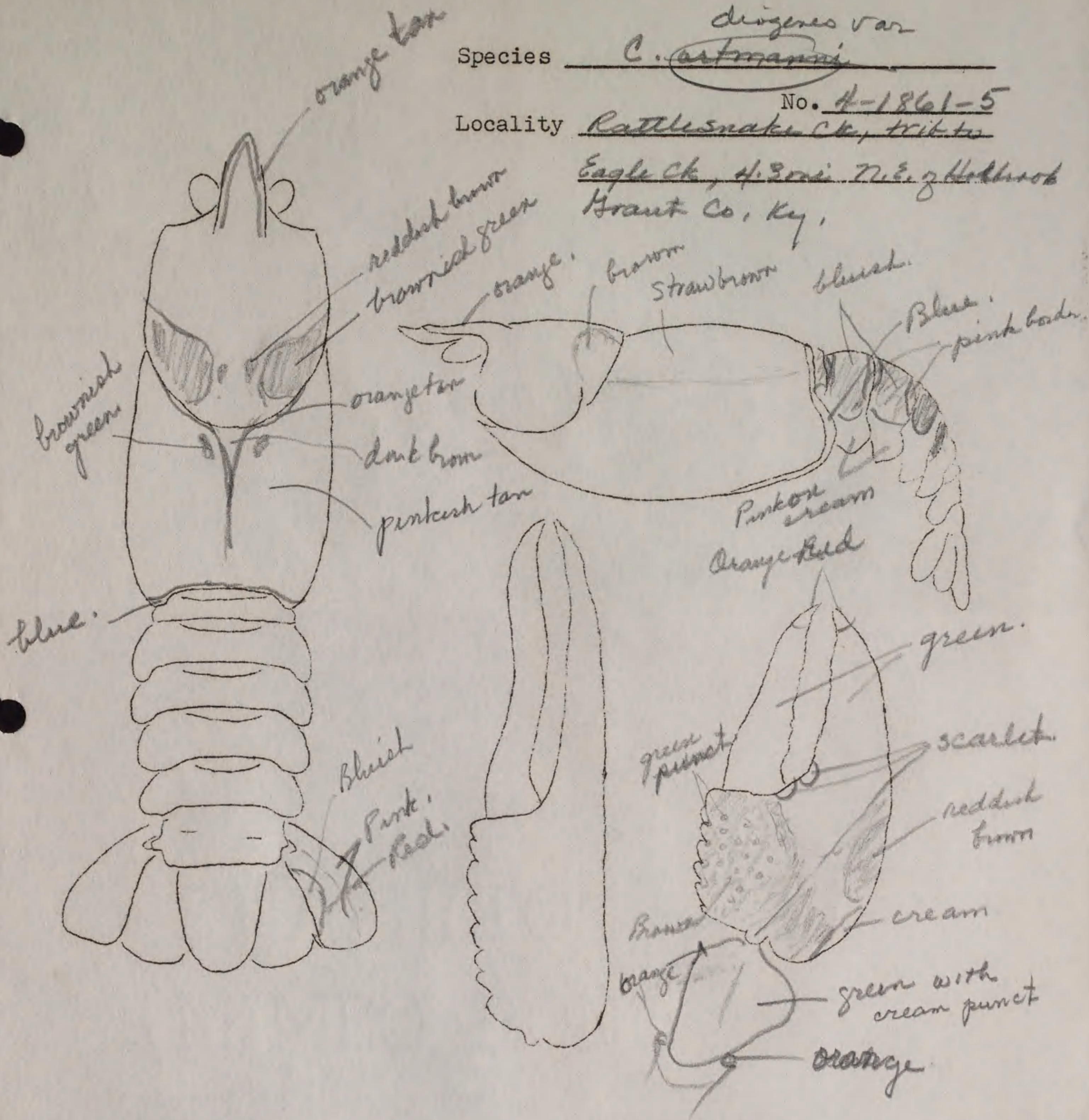
Locality Rattle Snake Ck, trib to

Eagle Ck, 4.3 mi NE. of Holbrook
Grant Co, Ky.



Species C. ^{diogenes var} ~~artmanni~~

No. 4-1861-5
Locality Rattlesnake Ck, tributary
Eagle Ck, 4.3 mi N.E. of Holbrook
Grant Co., Ky.



pinkish legs

No. 4-1861-6

Date _____

Warthille

Co. & State Owen Co., Ky.

749.0

Loc. Sub Eagle Ck.

^{U.S.}
on Rt 227, 2.3 mi

E. of Warthille -

Water clear

Flow mod.

Width 6-15'

Depth 6"

pH _____

Temp. _____

Bottom rocky

Vegetation _____

Shore Quercus Platanus

Air Temp. _____

Weather cloudy

Time 7:25

Capture seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. r. rusticus</u>	<u>2</u>						

757.3

749.0

23

No. 4-1961-1a, 1b.

Date _____

Carrollton Topotypes of ornatus Co. & State Carrollton Co., Ky.Loc. Ellis Creek, 4.4 mi SW ofU.S. Hy 42. (Little Ky. R. dr. 300 yds from river
rocks shine caused.Water clearFlow moderateWidth 10-15Depth 1'

pH _____

Temp. _____

Bottom slight covered rocksVegetation noneShore Acer, Platanus, Cornus, Juniperus

Air Temp. _____

Weather SunnyTime 10:00Capture Hand.

Det. _____

Coll. _____

Topotypes

CornutusO. r. rusticus

♂I

♂II

♀

♂j

♀j

♀e

♀y

1

4

4

3

4

1

ornatus [Ellis Branch 4 mi W. of Carrollton (Rt 42) perhaps 7 mi.]p. jeffersoni

Sub of South Fork of Beargrass Ck, Buchel, Jeff. Co.

" To Muddy Rk of
on U.S. Rt. 42.

" 2 mi E. of Louisville Corp line

766.5
62.1
4.4

761.5 - Carrollton

762.1 Ky R. Bridge at C. ton.

768.0 Trunkline Co line

No. 4-1961-2a, 2b, 2c

Date _____

Bedford

Co. & State

Trimble Co, Ky

769.9

Loc.

Millers Br., 4.6 mi N.E. of Bedford
on Rt 42.

Water

clear

Flow

mod

Width

10'

Depth

2

pH

Temp.

Bottom

rocky + silt

Vegetation

no

Shore

Platanus Salix, Acer

Air Temp.

Weather

Sunny

Time

Capture

Hand

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. ornatus</u>		1	2		1		
<u>C. b. laevis</u>		1	1				
<u>D. r. rusticus</u>	4	1					

Bedford 774.5

769.9

4.6

E. City limit 775.3

of Bedford.

No. 4-1961-3a, 3b, 3c

Date _____

Bedford.

Co. & State

Trimble Co., Ky

Loc.

Bare Bone Ck (?) 1 mi west of Bedford on
Rt. 754.

Water

near

Flow

mod.

Width

15'

Depth

6"

pH

Temp.

Bottom

bed rock

Vegetation

algae

Shore

Platanus

Air Temp.

Weather

cloudy

Time

11:45

Capture

hand

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. ornatus</u>	1	1	1				
<u>C. b. laevis</u>	2	1	2	2	1		
<u>D. r. rusticus</u>	2						

Planaria777.3 S. city limits
Bedford.781.6 turn 98783.4 Back on Rt 42787.5 Sligo

No. 4-1961-4a, 4b

Date _____

Sligo

Co. & State

Oldham Co

Ky

795.1

Loc.

Narrada Ck. 0.9 mi E. of ^{U.S.} Rt 42, 6.7 mi S.W.

of Sligo

Water

Greenish gray

Flow

swift where call.

Width

20

Depth

+ 2

pH

Temp.

Bottom

gravel bed rock,

Vegetation

Shore

Platanus Quercus,

Air Temp.

Weather

sunny

Time

12:45

Capture

seine

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. r. rusticus</u>	7	—	—	5	4	5	
<u>C. diogenes</u>					4 1		

22

795.1
787.5
7.6
7.7
6.7

796.0 main Rd -
951

813.9
795.1
18.8

No. 4-1961-5a, 5b, 5c

Date _____

Louisville

Co. & State

Jefferson Co., Ky.

813.9

Loc. 4.8 mi N.E. of Louisville on Rt. 42 - Creek.Water clearFlow moderateWidth 6-12'Depth 1

pH _____

Temp. _____

Bottom rockyVegetation algaeShore Platanus, Acer, Cercis - Dutchman's breechesSquirrel corn, Lilium, Hoptoad Violets, Mayapple, Blood root.

Air Temp. _____

Weather SunnyTime 2:50Capture Seine

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<i>C. p. jeffersoni</i>	10	¹² 12	5			1		28
<i>C. b. laevis</i>	3	3						6
<i>C. ornatus</i>		7	5					12
								(46)

809.4 Jefferson Co. leni

Plants collected

813.7
 13.9
 4.8

(264)

No. 4-1961-6 Type Locality of D. p. jeffersoni
 Date _____
Louisville Co. & State Jefferson Co., Ky
 Loc. Trick to Muddy Tr. & Bear Grass Cr., 2 mi
E. of Louisville on Rt 42
 Water clear Flow mod
 Width 6-15' Depth + 2 pH _____ Temp. _____
 Bottom rock
 Vegetation algae
 Shore Platanus Cereis Quercus
 Air Temp. _____
 Weather Sunny Time 3:25
 Capture seine

Det.	Coll.						
	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>D. p. jeffersoni</u>	9	2			1	3	

(15)

33.6
 25.7
 7.9

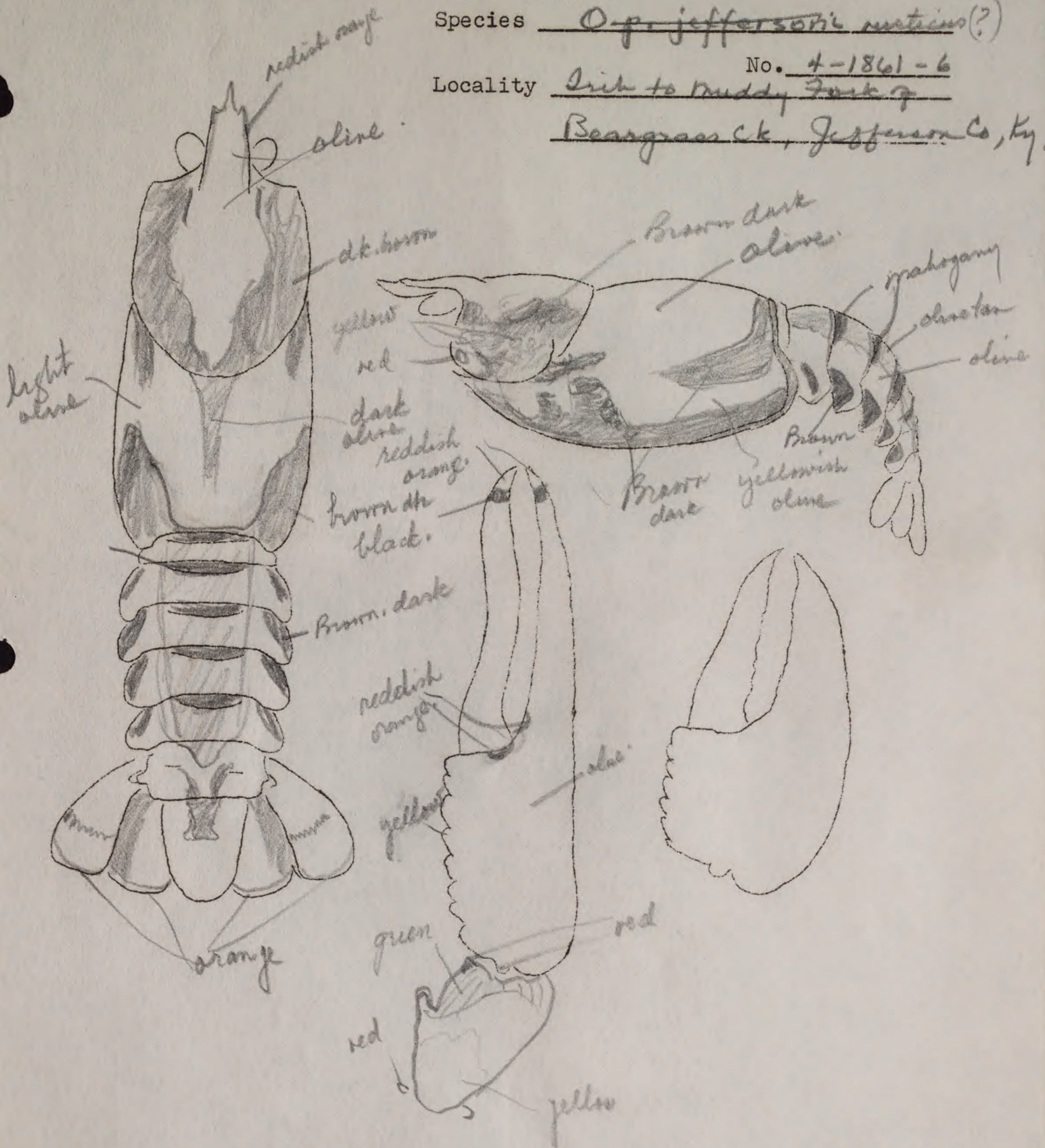
825.7 Middletown
 830.0 Eastwood
 831.3 Turnoff

Species O. p. jeffersoni naticus(?)

No. 4-1861-6

Locality Trick to Muddy Fork

Beargrass Ck, Jefferson Co, Ky.



No. 4-1961-7a, 7b 3 jars

Date

Middletown

Co. & State

Jefferson Co, Ky

833.6

Loc. Long Run, 1.9 mi N. of Rt 60, 5.6 mi E. of
Middletown

Water cloudy Flow sluggish

Depth 15' 1.5' pH Temp.

Bottom bed rock

Vegetation none

Shore Platanus Ulmus

Air Temp.

Weather sunny

Time 4:50

Capture seine

Det.

Coll.

2 jars - O. r. rusticus
C. b. laticornis

♂I	♂II	♀	♂j	♀j	♀e	♀y
17	17	27	2	6	16	
			2	1		

(88)

835.5

833.6

2.3

31.3

$$\begin{array}{r} 34 \\ 35 \\ 16 \\ \hline 85 \end{array}$$

$$\begin{array}{r} 20 \\ 25.7 \\ \hline 4.3 \end{array}$$

No. H-1961-8

Date _____

Shelbyville

Co. & State Shelby Co., Ky.

851.3 Loc. Tristo Cr. 3.4 mi S. of Shelbyville on Rt 60.
(South R. Dr.)

Water slightly cloudy Flow mod.

Width 20-30 Depth 1' pH _____ Temp. _____

Bottom rocky with algal sludge on rocks

Vegetation algae

Shore Platanus, Ulmus, Acer

Air Temp. _____

Weather Sunny Time 5:45

Capture Seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. r. rusticus</u>	<u>9</u>	<u>1</u>				<u>5</u>		
								(15)

Simpsonville 840.1

Shelbyville 847.9

3.4

Day

851.2

Lexington 50011.7
K.

(219)

No. 4-2261-1a, 1b, 1c

Date

Duningsville

Co. & State

Bath Co., Ky

Loc. 4.2 mi E. of Duningsville on U.S. Rt 60.

Water muddy

Flow mod

Width 20

Depth +2

pH

Temp.

Bottom rocky-silt,

Vegetation grass in areas

Shore

Hedysar Crataegus, Ulmus

Air Temp.

Weather cloudy

Time 10:50

Capture

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<i>O. r. rusticus</i>	7	9	3	26	29	2		
<i>O. juvenilis</i>				11	4			
<i>C. sp. (striatus?)</i>				1	2			
								(94)

58
18
15
3
94

120

312

198
132
60
390

69
648
42

Winchester 34.6
Mt. Sterling 50.6
Duningsville 64.8
Salt Lick 74.3

No. 4-2261-2a-e 2 jars.

Date _____

Moorehead.

Co. & State

Rowan Co, Ky.Loc. East fork of Triple Cr., 3.5 mi E. of
Moorehead on Rt 60.Water clear

Flow

mod to swift.

Width

- 30'

Depth

+ 2

pH

Temp.

Bottom

rock

Vegetation

none

Shore

Platanus, Prunus, Cercis.

Air Temp.

Weather

cloudy

Time

12:00

Capture

seine, hand

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>O. juvenilis</u>	3			2		1		
<u>C. bartonii</u>	1			1	1			
<u>C. robustus</u>				1				
<u>C. sp. (near striatus)</u> ^{like Cymatodonta?}			1					
<u>C. sp (striatus)</u>				2	1			(14)

98
86.3 Moorehead
3.5

No. 4-2261-3

Date _____

HaldemanCo. & State Rowan Co., Ky.

94.8

Loc. Triple Ck, East Fork (To Licking R.)
4.7 mi W. of Carter Co line on Rt 60.Water clear Flow mod.Width 10 Depth 1' pH _____ Temp. _____Bottom rocky-gravelVegetation noneShore Platanus, Ulmus

Air Temp. _____

Weather cloudy Time 1:30Capture seine

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y	
<u>C. bartonii</u>					<u>1</u>			
								(1)

1029
 99.5 Carter Co line
 85
 47
 3.4

No. 4-2261-Hen, 4b

Date _____

HaldemanCo. & State Rowan Co., Ky.

968

Loc. Triple Cr., 2.7 mi W. of Carter Co line
on Rt 60.Water clear Flow mod.Width 6-20' Depth +3 pH _____ Temp. _____Bottom rock gravelVegetation noneShore Platanus, Quercus, Prunus

Air Temp. _____

Weather cloudyTime 2:00Capture Hand

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<i>O. juvenilis</i> (?)	2	1	1	2 2			
<i>C. bartonii</i>		6	7	2			

No. 4-2261-5a, 5b, 5c ^{2 jars} Date _____Co. & State Carter Co., Ky.Loc. 102.9Aline Hill
trib to Sugar Creek at Jct of Rt 60 +
Rt 1024, 1.1 mile W. of Globe, on Rt 60.Water clear Flow rapidWidth 15 + Depth + 3 pH _____ Temp. _____Bottom rocky, with scattered large flat stonesVegetation noneShore flats

Air Temp. _____

Weather cloudy Time 2:40

Capture _____

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<i>O. pinnatus</i>	1						
<i>O. p. sanborni</i>	4					2	
<i>C. bartonii</i>	2	4	6	4	6		

29

104.0 Globe

102.9

109.0 Aline Hill

229

D7-13-52

No. 4-2261-6a, 6b.

Date _____

Greenville
(on battle space)
(Behind)

Co. & State

Carter Co., Ky.

Loc.

Barrett's Creek (trib to Little Sandy R) at
Greenville, on US Hwy 60

Water

clear

Flow

mod

Width

6-12

Depth

+ 3

pH

Temp.

Bottom

rocky, clay, silt.

Vegetation

some grass

Shore

Platanus Salix

Air Temp.

Weather

cloudy

Time

3:40

Capture

seine, Hand

Det.

Coll.

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>O. pinicollis</u>	<u>3</u>	<u>1</u>	<u>2</u>				
<u>C. bartonii</u>		<u>12</u>	<u>7</u>	<u>3</u>	<u>1</u>		

(29)

Grayson

124.3

No. 4-2261-7a7b

Date _____

CannonsburgCo. & State Carter Ky.Loc. Sub to Williams Ck. 5.6 mi W. of Cannonsburg on Rt 60.134.7 Large spec. from burrow on bank.Water slightly cloudy Flow mod.Width 15' Depth + 2 pH _____ Temp. _____Bottom sand, pebbles.Vegetation noneShore Paper birch, Salix

Air Temp. _____

Weather cloudy Time 4:25Capture snare, digging

Det. _____ Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>D. sp.</u>							
<u>G. striatus</u>							
<u>C. bartonii laevis</u>		1	1	1	1		
<u>O. juvenilis</u>				5	1		

Could this be real spinosus?
 broad punctate areola

Cannonsburg 140.3
 134.7
 5.6

No. 4-2261-8a, 8b

Date _____

HurricaneCo. & State Putnam Co., W. Va.

187

Loc. trib. of Hurricane, small deep-valley stream, 7.1 mi. W. of Putnam-Kanawha Co. line on U.S. Hwy 10.Water clear Flow modWidth 4-8 Depth 6" pH _____ Temp. _____Bottom rock, sand.Vegetation noneShore Carya, Platanus, Salix, Sassafras.

Air Temp. _____

Weather cloudyTime 6:25

Capture _____

Det. _____

Coll. _____

	♂I	♂II	♀	♂j	♀j	♀e	♀y
<u>C. robustus</u>	1				6		
<u>C. bartonii laevis?</u>		7	4	1	5		

(23)

~~46~~
 50460.7
 50011.7

 449.0

Putnam —
 Kanawha Co. line
 194.1
 87
 7